Retirement Choice 2015

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Photography Credit: Marine Barracks Washington, District of Columbia - U.S. Marine Corps LtGen. Willie J. Williams, center, salutes during his retirement ceremony July 10, 2013, at Marine Barracks Washington in Washington, DC. Williams had served as the director of Marine Corps Staff since 2009 and retired after 39 years of service.

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14. ABSTRACT
At their 15th year of service, military personnel who are eligible and intend to serve for 20 years must choose either: (1) High-3 retirement plan or (2) A reduced retirement (REDUX) and a $30,000 bonus paid at the 15th year of service. This paper is designed to help servicemembers make that decision. We describe the REDUX/bonus option as an early, partial cash-out of the servicemember's retirement pension that the member pays back in the form of reduced retirement checks over his or her entire lifetime. We calculate how much the servicemember will "pay back" (the reduction in pension benefits) and we calculate the implied APR or interest rate for this loan. For example, an E-7 who retires at age 38 with 20 years of service is paying an implicit interest rate of 15 percent and would see his or her retired pay reduced by $395,513 if he or she lived to 79 years. Even if the servicemember received the bonus tax free, the repayment amount is over 13 times the amount of the loan ($30,000). If this servicemember lives to 85, the repayment amount would be $523,008. For virtually all servicemembers, choosing REDUX/bonus is a bad (and costly) decision.

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Introduction

The Congress is currently considering changes in the military retirement system. As of 2015, however, military personnel who entered service after July 31, 1986 and who are eligible and intend to serve for 20 years must choose between two retirement plans at their 15th year of service.[1] Once the final selection is made, the choice is irrevocable unless Congress provides additional retirement options. The two choices are:

1. *High-3 retirement plan:* Retirement pay is based on the highest average basic pay for 36 months of a servicemember's career. These are usually the last 3 years.

2. *REDUX retirement plan plus a $30,000 bonus paid at the 15*th year of service: In return for accepting the bonus, REDUX provides smaller retirement checks.

How should Marines, Sailors, Airmen, and Soldiers decide which option to take? The Department of Defense (DOD) had a website that provided information and examples to help servicemembers, but it is currently unavailable.[2] We have used a different approach that many have found useful in evaluating these retirement choices.[3] Here, we update that work for those making the retirement choice in 2015.

We start by describing the $30,000 bonus as an early, partial cash-out of the servicemember's retirement pension. This $30,000 cash-out will be "paid back" later in the form of reduced retirement checks. By providing information on how much this cash-out will cost in terms of lower future retirement income, we hope that we can help servicemembers make more informed choices about which plan to select.

[1] Selection of the retirement plan begins at about 14.5 years of service.

[2] The DOD website is located at http://militarypay.defense.gov/Calculators/RetirementChoiceCalculator.aspx.

[3] The original paper was by Aline O. Quester and Lewis G. Lee, *The Retirement Choice: FY 2006*, CNA Research Memorandum D0003713.A6/4REV, Oct. 2005.

First, though, we briefly look at the general provisions of military retirement and then focus more specifically on the two plans. Both pension choices have the following features:

- Both provide retirement income as a percentage of the average of the highest 36 months of basic pay. There is no risk; the retirement payments are specified by law and are guaranteed by the full faith and credit of the U.S. government.
- Both offer deferred compensation for which no taxes are paid until the retired pay is received.[4] Such plans are called tax-sheltered retirement plans.
- Both are protected against inflation. High-3 has full inflation protection because it changes yearly with the Consumer Price Index (CPI), whereas REDUX/bonus has less protection (CPI minus 1 percentage point). The value of inflation protection for retirement pay cannot be overemphasized. Most military members will be retired in about 40 years. In 40 years, one can expect prices to increase at least four times, meaning that what costs $1 at military retirement will end up costing $4.[5]

To summarize, military pensions are risk-free, tax-sheltered, inflation-adjusted annuities with options for spousal benefits (such as the Survivor Benefit Plan) on the death of the member. Such private pension provisions are very expensive, and only a few companies offer them.

[4] The services pay into the retirement fund each year, and the fund grows while the member is in the service. The servicemember has no tax liability for the service's contributions to the retirement fund.

[5] The CPI in 2014 was nearly 6 times the level it was in 1970. This period includes the sharp inflation in 1974 (12.3 percent), 1979 (13.3 percent), and 1980 (12.5 percent). The commonly assumed 3.5-percent inflation rate leads to over a fourfold increase in prices over a 40-year period. For the last 40 years inflation has averaged 4.3 percent (2.5 percent over the last 20 years).

How Much is Retirement Income Reduced Under REDUX/Bonus?

We now turn to the retirement choice in the 15th year of service. Choosing REDUX/bonus reduces retirement income. The higher the grade and the lower the years of service (YOS) at retirement, the greater the reduction. In short, fast-trackers who retire very early are penalized most severely. For all military personnel, however, REDUX retirement income is substantially lower than retirement income under the High-3 plan.[6] Moreover, as each year passes, the difference between REDUX and High-3 retirement income increases. For example, the additional reduction in retirement income under REDUX/bonus for those making the choice in 2015 (compared with 2001) is well over $100,000 for virtually all retirees! (See Figure 1)[7]

Some will find it easier to understand how the two plans differ by comparing plan descriptions (See Table 1), whereas others will prefer to look at the figures that follow, which show the difference in retirement payments under the two plans.

First, we present some examples. To calculate the two retirement pay streams for someone making the decision at 15 years of service in 2015, we need to make the following assumptions:

- Military pay will grow at 3.5 percent per year until the servicemember retires.[8]

- The CPI will grow at 3.5 percent per year.

[6] Later in this paper, we discuss the Thrift Savings Plan (TSP) and other bonus investment options. The examples that follow assume that the servicemember pays taxes on, and spends, the bonus.

[7] This assumes that the servicemember lives to age 79. The differences are larger if the servicemember lives longer.

[8] This is the 20-year average pay increase for an E-7 with 15 years of service.

Figure 1. REDUX/bonus choice gets worse each year: Differences since 2001 are over $100,000!

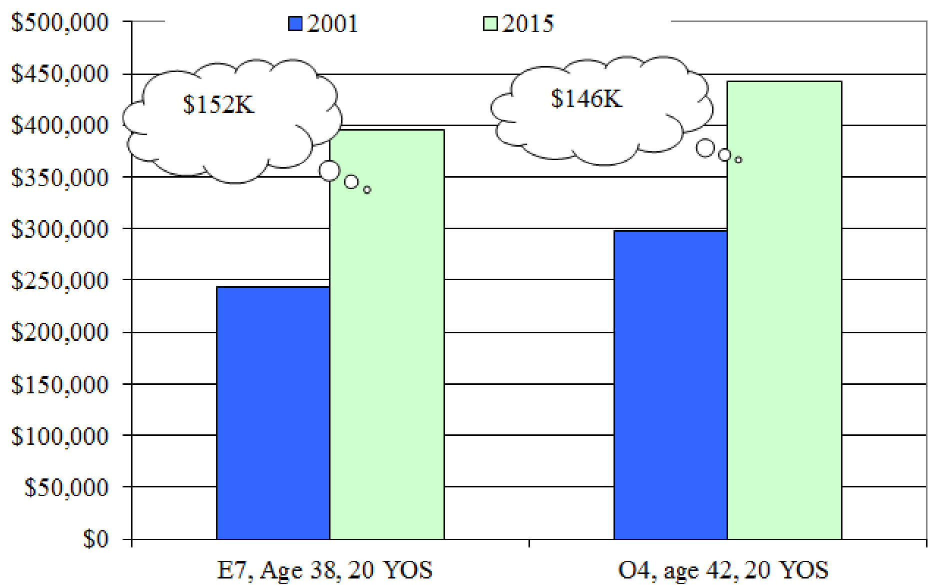


Table 1. Retirement choices for those who entered the service after 31 July 1986, based on highest average monthly basic pay over 36 months

	Retirement plan	
	High-3	REDUX + $30,000 bonus at 15 years of service
Percentage of basic pay at 20 years of service	50.0%	40.0%
Increase for each year of service past 20	2.5%	3.5%
At 30 years of service	75.0%	75.0%
Yearly cost-of-living adjustments	Full CPI[a]	CPI minus 1 percentage point
Age 62	Retirement payments set equal to each other at age 62 (See figures 1 through 4)	
Age 63 onward	Full CPI adjustments	CPI minus 1 percentage point

[a] Consumer Price Index for urban wage earners and clerical workers.

- The servicemember will live to age 79.[9]
- Servicemember tax brackets follow:[10]

  —*Enlisted:* 15 percent; after-tax bonus is $25,500

  —*Warrant officers:* 25 percent; after-tax bonus is $22,500

  —*Commissioned officers:* 28 percent; after-tax bonus is $21,600.

Figure 2 shows the two after-tax retirement pay streams, REDUX and High-3, from the first retirement year until age 79 for an E-7 who expects to retire at age 38 with 20 years of service. We see a sharp reduction in retirement pay under REDUX until age 62, then a re-indexing that equates the two retirement pays, followed by a gradual erosion in REDUX retirement pay after age 62 when compared with High-3. For this servicemember, total retirement pay is reduced by $395,514 if he or she selects REDUX/bonus.

Figure 3 shows the difference in payments for a servicemember who expects to retire as an E-8 at age 42 with 24 years of service. Here, the reduction in retired pay ($390,026) is just a little less than that for the E-7 who retires at 38 with 20 years of service (See figure 2).

Figure 4 shows the situation for a CWO-3 who expects to retire at age 38 with 20 years of service. Here, the reduction in retirement pay is $455,814 under REDUX/bonus.

Figure 5 shows the situation for an O-6 who expects to retire at age 50 with 26 years of service. Here, the officer's retired after-tax pay is $390,133 less under REDUX/bonus. (Appendix A illustrates these three situations in a different format.)

[9] The National Vital Statistics Reports show an additional 40.4 years for someone age 40, so we err on the side of caution and use an overall life expectancy of 79 years for military retirees. In a later section, we explore what happens if the servicemember lives longer than 79 years. http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_07.pdf.

[10] Later, we discuss what happens if the $30,000 bonus is tax-free.

Figure 2. E-7 retiring at 38 with 20 years of service, 15% tax bracket

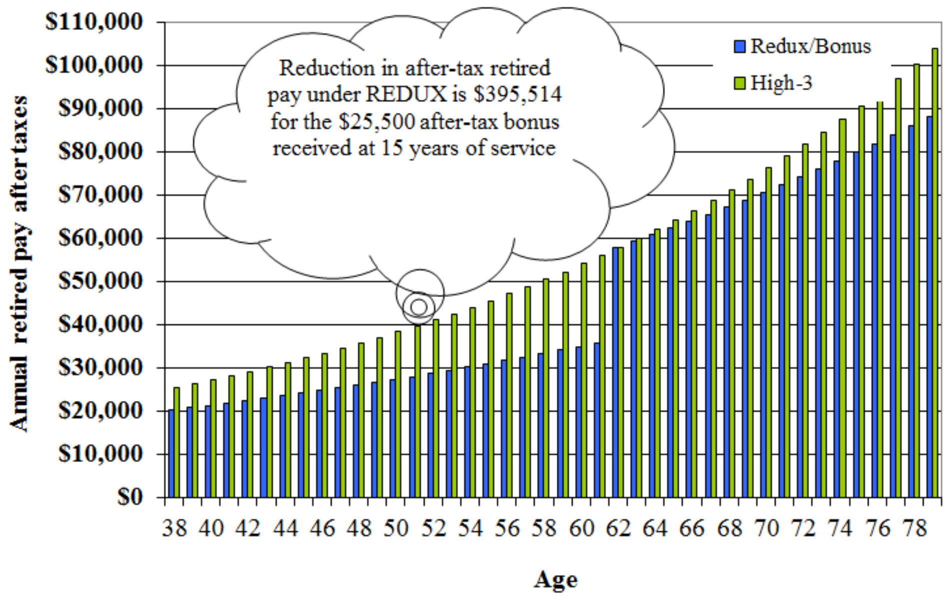


Figure 3. E-8 retiring at 42 with 24 years of service, 15% tax bracket

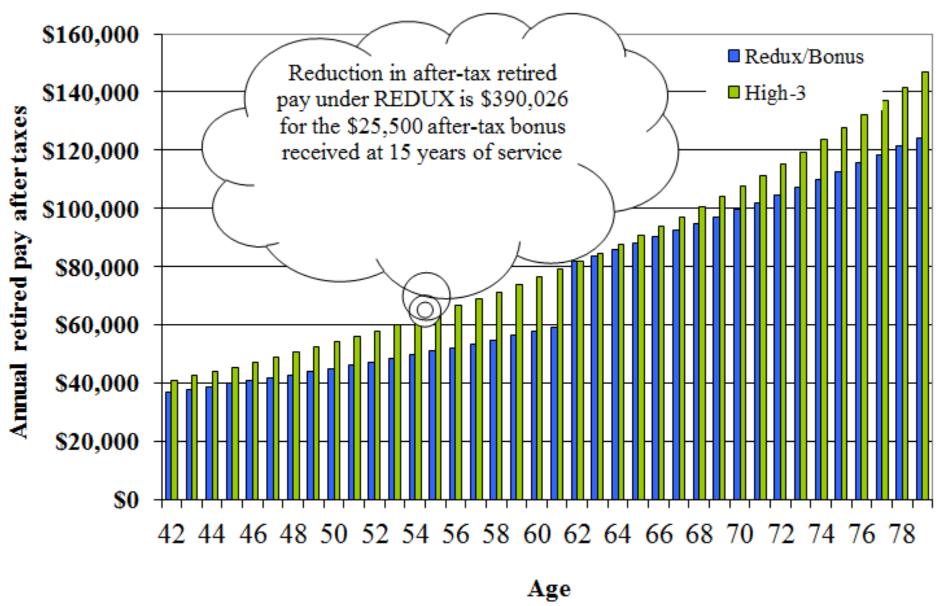


Figure 4. CWO-3 retiring at 38 with 20 years of service, 25% tax bracket

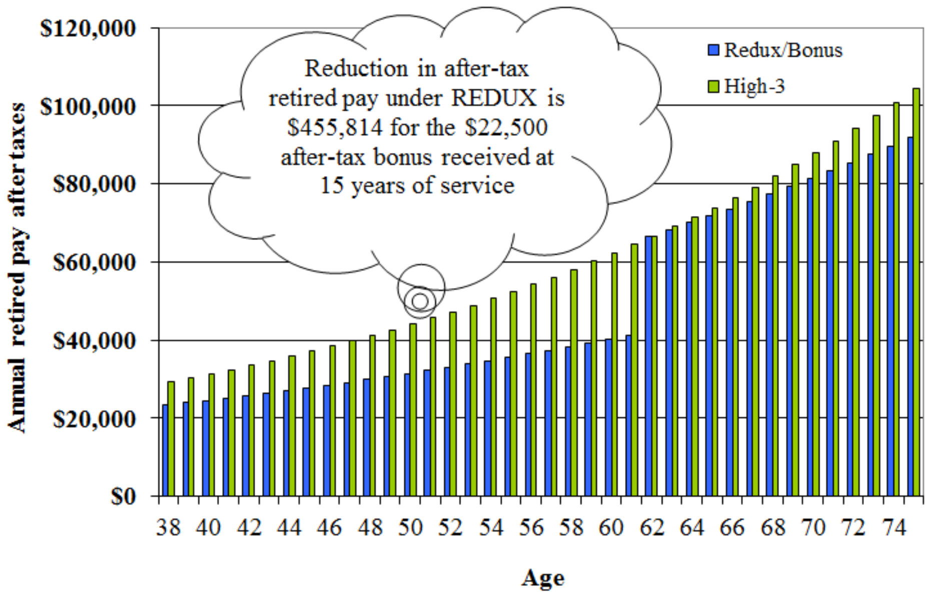
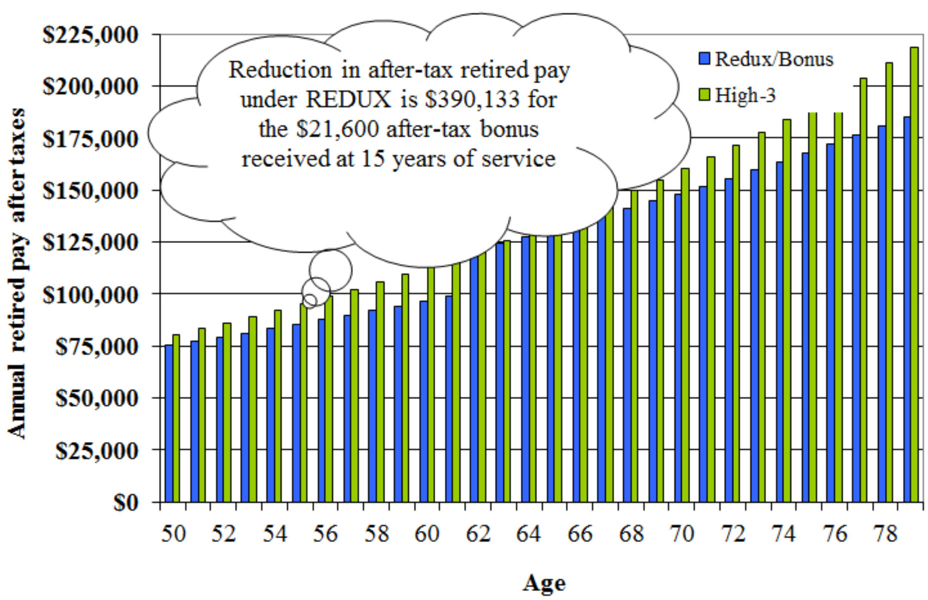


Figure 5. O-6 retiring at 50 with 26 years of service, 28% tax bracket



Next, we turn to the way in which we propose that servicemembers evaluate the lower retirement pay that they will receive if they select REDUX and the $30,000 bonus.

Get paid now or get paid later?

Bonus-takers will get some of their retirement income early, at the 15-year-of-service point. The best way to think about this is to consider REDUX's $30,000 bonus as an early cash-out of part of a servicemember's retirement pension. We can calculate how much this cash-out costs the member by thinking of it as a "loan" to be paid back later in the form of lower retirement checks.

This so-called loan, given at 15 years of service, is paid back over the servicemember's entire retired lifetime. Most people are familiar with car loans, mortgages, and credit card debt. Car loans and mortgages have fixed loan periods, often 5 years for cars and 30 years for mortgages. Credit card debt is a little different, requiring only a minimum payment per month. We characterize all these loans by the interest rates and interest payments attached to them.

The $30,000 bonus has a rather peculiar payback scheme. The servicemember pays nothing until retirement, pays quite a bit from the beginning of retirement until age 62, and then continues to pay back smaller amounts over the rest of his or her life. The "payments" are the differences in the height of the High-3 and REDUX/bonus bars in Figure 2 through 5. Although this payment scheme is peculiar, we can calculate the implied interest rate, or annual percentage rate (APR). We do this for a variety of situations and show the results in Table 2 for enlisted personnel. Results for chief warrant officers and commissioned officers are in Appendix B.

Looking at Table 2, if an E-6 expects to retire at age 38 with 20 years of service (YOS) and lives to age 79, our calculations show that, by selecting REDUX/bonus at 15 YOS, the servicemember:

- Pays an implicit interest rate of 13.8 percent for the cash-out (this is after tax)
- Loses $338,884 in after-tax retirement income
- Would be required to earn at least 16.3 percent before tax each year until age 79 on the invested bonus to make up the difference between the REDUX pension and the High-3 pension.

Table 2. REDUX/bonus choice for enlisted personnel (15% tax rate)

Characteristics at retirement	Implicit interest rate for bonus (after tax)	Breakeven interest rate[a]	Total reduction in after-tax retirement pay	"Interest"[b]
E-6 at 20 YOS				
Age 38	13.8%	16.3%	$338,884	$313,384
Age 40	13.6%	16.0%	$298,305	$272,805
Age 42	13.3%	15.7%	$261,532	$236,032
E-7 at 20 YOS				
Age 38	15.0%	17.7%	$395,514	$370,014
Age 40	14.8%	17.5%	$348,154	$322,654
Age 42	14.6%	17.1%	$305,236	$279,736
E-7 at 22 YOS				
Age 40	12.7%	14.9%	$369,373	$343,873
Age 42	12.4%	14.6%	$323,442	$297,942
Age 44	12.1%	14.2%	$282,141	$256,641
E-8 at 20 YOS				
Age 38	15.8%	18.6%	$432,607	$407,107
Age 40	15.6%	18.3%	$380,805	$355,305
Age 42	15.3%	18.0%	$333,862	$308,362
E-8 at 22 YOS				
Age 40	13.4%	15.7%	$411,645	$386,145
Age 42	13.1%	15.4%	$360,458	$334,958
Age 44	12.8%	15.0%	$314,430	$288,930
E-8 at 24 YOS				
Age 42	11.5%	13.5%	$390,026	$364,526
Age 44	11.2%	13.1%	$340,029	$314,529
Age 46	10.8%	12.7%	$295,493	$269,993
E-8 at 26 YOS				
Age 44	9.9%	11.6%	$364,274	$338,774
Age 46	9.5%	11.2%	$316,703	$291,203
Age 48	9.1%	10.7%	$274,831	$249,331
E-9 at 20 YOS				
Age 38	16.9%	19.9%	$494,670	$469,170
Age 40	16.7%	19.7%	$435,436	$409,936
Age 42	16.5%	19.4%	$381,759	$356,259
E-9 at 22 YOS				
Age 40	14.3%	16.9%	$473,899	$448,399

Characteristics at retirement	Implicit interest rate for bonus (after tax)	Breakeven interest rate[a]	Total reduction in after-tax retirement pay	"Interest"[b]
Age 42	14.1%	16.6%	$414,970	$389,470
Age 44	13.8%	16.2%	$361,981	$336,481
E-9 at 26 YOS				
Age 44	10.6%	12.5%	$424,281	$398,781
Age 46	10.2%	12.0%	$368,873	$343,373
Age 48	9.8%	11.6%	$320,103	$294,603
E-9 at 30 YOS				
Age 48	7.8%	9.2%	$371,631	$346,131
Age 50	7.5%	8.8%	$324,632	$299,132
Age 52	7.2%	8.4%	$284,804	$259,304

a. This is the rate of return for investing the bonus that the servicemember would need to obtain to break even between REDUX/bonus and High-3. This rate of return would provide after-tax amounts that exactly equal the differences in pension payments between High-3 and REDUX.

b. Reduction in retirement pay after excluding the after-tax bonus of $25,500.

Breaking even: What return would you need for your investment?

The breakeven interest rate is the before-tax interest rate that the servicemember would have to earn to equalize compensation under the High-3 vice REDUX/bonus retirement packages. For example, if the servicemember put the after-tax bonus into an investment account, that investment account would have to earn the breakeven interest rate every year to generate an income equal to the yearly difference in retirement pensions. And, at age 79, the account would be exhausted. If, for only one year, the member earned less than the breakeven interest rate, the account would be exhausted before the member's death.[11] The breakeven interest rates are high enough that it will be virtually impossible for anyone to break even.

[11] The breakeven interest rate is higher than the after-tax interest rate because taxes must be paid on investment income. The after-tax implicit interest rate times 1 minus the tax rate equals the breakeven interest rate.

How much retirement income is forgone?

For the 40-year-old E-6 with 20 years of service, table 2 shows an "interest" payment of $272,805—the difference between the total after-tax reduction in retired pay ($298,305) and the after-tax amount of the loan ($25,500). Although all the interest rates are high, it is probably the cumulative amount of forgone retirement income that is most surprising. How do these amounts compare with those for a 30-year home mortgage? Table 3 shows this information.

Table 3. Payments on a 30-year $30,000 mortgage[a]

Interest rate	Total amount paid	Total interest payments
3.00%	$45,533	$25,533
4.00%	$51,561	$21,561
5.00%	$57,767	$27,767
6.00%	$64,751	$34,751
7.00%	$71,853	$41,853
8.00%	$79,247	$49,247
9.00%	$86,899	$56,899
10.00%	$94,778	$64,778

[a.] Information is from http://www.bankrate.com/calculators.aspx.

Even for a 9.0-percent 30-year home mortgage loan—a very high interest rate by current standards—one pays back a little under 3 times the amount borrowed. For today's 4.0-percent mortgages, one pays back less than twice the loan amount. In contrast, for the after-tax portion of the $30,000 bonus, table 2 shows that the servicemember is paying back from 10 to 19 times the bonus (i.e., the amount "borrowed")![12] **Why are the repayment amounts so large for this $30,000 "loan"?**

Consider someone who dies very early in retirement. Indeed, if the servicemember dies at the retirement point, there is no repayment. The servicemember got the $30,000 at the 15-year point but died before collecting any retirement monies. So one reason why repayment amounts are so large is because the average life expectancy is 79 years. The terms of this financial arrangement are reduced retirement checks over the entire lifetime.

[12] All calculations are after taxes. An E-6 with 20 years of service who retires at age 42 pays back $261,532 for the $25,500 ($261,532/$25,500) = 10.3; an E-9 who retires with 20 years of service at age 38 pays back 19.4 times the amount borrowed ($494,670/$25,500=19.4).

The second reason the repayment amounts are so large is that one cannot pay off this "loan" early. If the servicemember chooses REDUX/bonus, the servicemember who lives the normal lifespan loses tremendous amounts of retirement income. The servicemember who lives longer than the normal lifespan loses even more.

What if you live longer than 79 years?

The longer the servicemember lives, the greater the loss in retirement income for those who chose the REDUX retirement and the $30,000 bonus. Table 4 shows some examples for enlisted servicemembers and officers if the servicemember lives until 85, rather than 79.

The E-7 who retires at 38 with 20 years of service will pay back $523,008 in reduced retirement income for the $30,000 bonus received at 15 years of service if he or she lives to 85. Living to 90 (not shown), the servicemember who took the bonus will lose $681,325 in retirement income.

Table 4. Examples of reduction in retirement pay if REDUX/bonus is chosen: by length of life

Status at retirement			Reduction in retirement pay by length of life		
Grade	Age	Years of service	Age 79	Age 85	Difference ($)
E-6	38	20	$338,884	$448,124	$109,240
E-7	38	20	$395,514	$523,008	$127,494
CWO-3	38	20	$455,814	$602,747	$146,933
O-4	44	20	$442,509	$603,580	$150,362
O-5	44	22	$458,114	$659,899	$201,785

What if the $30,000 bonus is tax-free?

If the servicemember chooses REDUX/bonus while in a combat zone, the $30,000 bonus is tax-free. Should this make a difference in the decision? We believe it should not. Consider the E-7 who retires at 38 with 20 years of service or the O-5 who retires at 44 with 22 years of service. If the bonus is tax-free, the E-7 will get the full $30,000 (rather than the $25,500 we assumed when the bonus was taxed) and the O-5 will get the full $30,000 (rather than the $21,600 we assumed when the bonus was taxed). Both, though, will still pay back (through reduced retirement income) the full

amounts in the age 79 column of Table 4: $395,514 for the E-7 and $458,114 for the O-5. And, that is only the reduction in retirement pay if they live to age 79. As shown in the age 85 column of Table 4, if they live longer, the reductions will be larger.

Why would anyone choose REDUX/bonus?

Why would anyone reject the more generous High-3 retirement plan and select the bonus and associated reduced retirement payments under REDUX? There are two main reasons:

1. Servicemembers want or need the money now.
2. Servicemembers think that they can do better by investing the $30,000. In the past, many believed that the federal government Thrift Savings Plan (TSP) might provide such an investment opportunity.

Neither of these reasons should justify the REDUX/bonus choice. Servicemembers who want or need the money now should look into other ways to obtain the required funds. Are there alternatives for borrowing $30,000 that do not involve several hundred thousand dollars of interest payments? Second, returns from TSP accounts have not approached the returns required to make a REDUX selection worthwhile.

There also are some misconceptions about the TSP. Many private-sector employees, as well as civilian federal government employees, have long had the option of putting some of their pre-tax earnings into various types of savings plans designed for retirement. TSPs either supplement or, more likely, replace private-sector pensions. Retirees then supplement their Social Security payments in their retirement years by drawing down their TSPs.

Servicemembers now can contribute pre-tax dollars to a TSP. By contributing to the TSP, uniformed personnel can save additional monies for the years in which they are truly retired. Because TSPs were designed to provide savings for the older years, however, there are tax penalties for withdrawals made before age 59.5.[13] In short, servicemembers should not put savings that they anticipate needing before their sixties in a TSP.

Retirement savings plans such as the TSP share one feature with conventional military retirement plans—namely, the tax-sheltering of pre-retirement income. Many

[13] Under exceptional circumstances, the tax penalties for withdrawals before age 59.5 can be waived.

servicemembers, in fact, do not seem to realize that military pensions are tax-sheltered. Retirement tax sheltering means that *no taxes are paid until the money is received in retirement*. With military pensions, the member pays no taxes on the accrued benefits until the pensions are paid in retirement. With TSP, the contributions to the TSP are pre-tax, and taxes are not paid until the money is withdrawn. TSPs, however, *lack* the two other important features of the High-3 retirement plan:

- Risk-free, guaranteed payments or returns
- Full inflation protection.

The TSP offered to military members allows the member to choose the fund, or funds, in which to invest the savings. These funds differ by the level of risk or variability of the investment returns. Funds that have higher risk will have higher average returns for long-term investors, but those returns will be more variable. *None* of the funds, however, have *inflation protection or guaranteed returns*.

Are the TSP and the $30,000 bonus related?

The introduction of TSP for military members and the choice between REDUX/bonus and High-3 occurred at about the same time. Although the timing was coincidental, many commentators at the time linked the two ideas, suggesting that servicemembers might elect REDUX/bonus and put the maximum amount of the bonus that can be tax-sheltered in a TSP account.

We find the linkage in the press between TSP and the $30,000 partial cash-out of the High-3 pension to be puzzling. Why would servicemembers want to give up the inflation protection provided by military retirement and invest that money in non-inflation-protected TSPs? Why would they even consider a cash-out of part of their pensions when the implicit interest rates that they will pay for this are greater than the long-run returns in the stock market? Why give up a riskless investment for a risky one if you can expect to earn a lower return on the risky investment? Although we see the TSP as an opportunity for servicemembers to put additional money away for their old age, it does not make sense for them to cash out some of their tax-sheltered, inflation-protected, guaranteed military retirement income for a TSP.[14]

[14] Saving money in a TSP is an excellent idea as long as one does not have to reduce future retirement income to do so. For example, saving some reenlistment bonus money or special pay in a TSP is an excellent way to ensure greater income in one's older years. The maximum amount that can be tax-sheltered in a TSP is $18,000 in 2015.

Retirement choice decisions

CNA has been conducting an extensive education campaign about retirement choice since 2002. In an attempt to further educate, the Marine Corps issued MARADMINs between 2007 and 2011, which reinforced the Commander's responsibility to:

- Ensure that all affected Marines receive appropriate counseling about this choice.
- Certify that Marines electing REDUX/bonus are recommended and qualified to continue to 20 years of service.
- Verify that a CO, XO, or sergeant major witness the election in block 13 of the DD form 2839.[15]

We believe that these efforts, combined with those of the manpower management, separations, and retirement branch (MMSR), have been important in ensuring that Marines understand this choice and make decisions that reflect that understanding. We attribute the continuing decline in the REDUX/bonus take rate to this education campaign. The sharp drop between FY07 and FY08 (from 29 percent to 24 percent) can be attributed to the first MARADMIN in 2007 that energized Marine Corps leaders.

[15] The latest one to date is MARADMIN 427-11.

Conclusions

We find that, for almost all servicemembers, the REDUX retirement plan plus a \$30,000 bonus paid at the 15th year of service is a bad choice that significantly reduces their retirement income. The higher the grade, the lower the years of service at retirement, and the longer the servicemember lives, the greater the reduction. Moreover, as each year passes, the difference between REDUX and High-3 retirement income increases.

Thinking of the \$30,000 bonus as a "loan," this is a loan that is paid back (through lower retirement income) at extremely high interest rates. Even if servicemembers invest the bonus, the required interest rates make it virtually impossible for them to break even.

Despite the significant downsides of the REDUX/bonus choice, some servicemembers still choose this option every year. Although the share taking REDUX/bonus has fallen over time, a significant percentage of eligible Marines are still choosing this option. We continue to work with the Marine Corps leadership to help inform Marines about the consequences of this choice.

Appendix A: REDUX/Bonus Choice for Warrant Officers

This appendix shows the information for warrant officers.

Table 5. REDUX/bonus choice for warrant officers (25% tax rate)

Characteristics at retirement	Implicit interest rate for bonus (after tax)	Breakeven interest rate[a]	Total reduction in after-tax retirement pay	"Interest"[b]
CWO-2 at 20 years of service				
Age 38	16.3%	21.8%	$406,994	$384,494
Age 40	16.1%	21.5%	$358,259	$335,759
Age 42	15.9%	21.2%	$314,096	$291,596
CWO-3 at 20 years of service				
Age 38	17.3%	23.1%	$455,814	$433,314
Age 40	17.1%	22.8%	$401,234	$378,734
Age 42	16.9%	22.5%	$351,772	$329,272
CWO-3 at 22 years of service				
Age 40	14.7%	19.6%	$438,384	$415,884
Age 42	14.4%	19.2%	$383,872	$361,372
Age 44	14.1%	18.8%	$334,854	$312,354
CWO-4 at 24 years of Service				
42	13.1%	17.5%	$454,909	$432,409
44	12.8%	17.1%	$396,595	$374,095
46	12.4%	16.6%	$344,650	$322,150
CWO-4 at 26 years of service				
44	11.3%	15.0%	$429,157	$406,657
46	10.9%	14.5%	$373,113	$350,613
48	10.5%	14.0%	$323,782	$301,282
CWO-5 at 30 years of service				
48	8.6%	11.4%	$406,738	$384,238
50	8.2%	11.0%	$355,299	$332,799
52	7.9%	10.6%	$311,709	$289,209

a. This is the rate of return for investing the bonus that the servicemember would need to obtain to break even between REDUX/bonus and High-3. This rate of return would provide after-tax amounts that exactly equal the differences in pension payments between High-3 and REDUX.

b. Reduction in retirement pay after excluding the after-tax bonus of $22,500.

Appendix B: REDUX/Bonus Choice for Commissioned Officers

This appendix shows the information for commissioned officers.

Table 6. REDUX/bonus choice for commissioned officers (28% tax rate)

Characteristics at retirement	Implicit interest rate for bonus (after tax)	Breakeven interest rate[a]	Total reduction in after-tax retirement pay	"Interest"[b]
O-4 at 20 years of service				
Age 42	19.4%	27.0%	$442,509	$420,909
Age 44	19.2%	26.7%	$386,211	$364,611
Age 46	18.9%	26.2%	$335,355	$313,755
O-5 at 20 years of service				
Age 42	20.5%	28.4%	$490,463	$468,863
Age 44	20.2%	28.1%	$428,064	$406,464
Age 46	19.9%	27.7%	$371,697	$350,097
O-5 at 22 years of service				
Age 44	16.8%	23.3%	$458,114	$436,514
Age 46	16.4%	22.8%	$397,946	$376,346
Age 48	16.0%	22.2%	$344,096	$322,496
O-5 at 24 years of service				
Age 46	14.0%	19.4%	$426,393	$404,793
Age 48	13.6%	18.8%	$369,337	$347,737
Age 50	13.0%	18.1%	$318,868	$297,268
O-5 at 26 years of service				
Age 48	11.6%	16.2%	$388,561	$366,961
Age 50	11.2%	15.5%	$336,711	$315,111
Age 52	10.7%	14.8%	$291,556	$269,956
O-6 at 24 years of service				
Age 46	14.8%	20.6%	$486,068	$464,468
Age 48	14.4%	20.0%	$421,027	$399,427
Age 50	13.9%	19.3%	$363,495	$341,895
O-6 at 26 years of service				
Age 48	12.4%	17.2%	$450,211	$428,611
Age 50	12.0%	16.6%	$390,133	$368,533
Age 52	11.4%	15.9%	$337,815	$316,215

Characteristics at retirement	Implicit interest rate for bonus (after tax)	Breakeven interest rate[a]	Total reduction in after-tax retirement pay	"Interest"[b]
O-6 at 28 years of service				
Age 50	10.5%	14.6%	$424,881	$403,281
Age 52	10.1%	14.0%	$370,268	$348,668
Age 54	9.7%	13.4%	$323,744	$302,144
O-6 at 30 years of service				
Age 52	8.9%	12.4%	$395,400	$373,800
Age 54	8.6%	12.0%	$349,129	$327,529
Age 56	8.4%	11.7%	$311,022	$289,422

a. This is the rate of return for investing the bonus that the servicemember would need to obtain to break even between REDUX/bonus and High-3. This rate of return would provide after-tax amounts that exactly equal the differences in pension payments between High-3 and REDUX.

b. Reduction in retirement pay after excluding the after-tax bonus of $21,600.

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